#### RESEARCH PAPERS

基于表面更新理论的臭氧吸收增强因子及应用

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摘要 Based on the Danckwerts surface renewal model, a simple explicit expression of the enhancement factor in ozone absorption with a first order ozone self-decomposition and parallel second order ozonation reactions has been derived. The results are compared with our previous work based on the film theory. The 2,4-dichlorophenol destruction rate by ozonation is predicted using the enhancement factor model in this paper.

关键词 <u>enhancement factor</u> <u>ozone absorption</u> <u>surface renewal model</u> 分类号

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# **Enhancement Factors in Ozone Absorption Based on the Surface Renewal Model and its Application**

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**Abstract** Based on the Danckwerts surface renewal model, a simple explicit expression of the enhancement factor in ozone absorption with a first order ozone self-decomposition and parallel second order ozonation reactions has been derived. The results are compared with our previous work based on the film theory. The 2,4-dichlorophenol destruction rate by ozonation is predicted using the enhancement factor model in this paper.

**Key words** enhancement factor; ozone absorption; surface renewal model

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